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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/055,876	01/23/2002	Michael Johnson	256.116US1	8875

128 7590 01/22/2007  
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EXAMINER
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STREGE, JOHN B

ART UNIT	PAPER NUMBER
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2624

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/22/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/055,876

Applicant(s)

JOHNSON ET AL.

Examiner

John B. Strege

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-11 is/are allowed.
- 6) ☒ Claim(s) 12-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
- Paper No(s)/Mail Date \_\_\_\_\_.

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

***Response to Amendment***

The amendment filed 11/07/06 has been entered in full.

***Response to Arguments***

Applicant's arguments, see pages 8-9, filed 11/07/06, with respect to claims 1-11 have been fully considered and are persuasive. The rejection of claims 1-11 has been withdrawn .

Applicant's arguments filed 11/07/06 regarding claims 12-29 have been fully considered but they are not persuasive. Specifically the Applicant argues that Lewis does not disclose using the three pixel coordinates from a captured image to compare against a feature vector also having three pixel coordinates and can derive a reading. The Examiner points out that this limitation is only claimed in claim 1, however none of the other independent claims reflect this limitation therefore the arguments are irrelevant. Therefore the rejection of claims 7-29 is maintained and is described below.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 12-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Lewis et al. USPN 5,673,331 (hereinafter "Lewis").

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 12-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Lewis et al. USPN 5,673,331 (hereinafter "Lewis").

Lewis discloses a method of processing an image, comprising: receiving one or more sub images within an image (col. 7 lines 25-32 disclose that a video camera captures one or more signal of a meter, converts the signals to a digital representation, and each region of the digital representation that corresponds to the scale of a meter is calibrated, thus one or more sub images are received and each sub image is separated from the image); Lewis discloses an image calibrator 7 that performs the functions of defining the required parameters for each meter appearing in the digitized image (col. 4 lines 44-46). This image calibrator describes feature vectors (col. 4 line 50-67) associated with each template (col. 5 lines 19-22) to locate one or more features within the sub images, wherein the feature vectors are represented as a collection of three pixel coordinates for each sub-image (each region of the digital representation which corresponds to the scale of a meter is calibrated, col. 7 lines 29-30, this calibration includes three pixel coordinates [the pivot pixel point of the needle is used as well as the leftmost pixel point of travel and the rightmost pixel point of ravel of the needle, col 4.

lines 50-67, furthermore this feature vector identifies the shape, coverage area, and angular position by selectively defining at least three pixel coordinates identified within the particular sub image]) and each sub image representing a graphical symbol (each sub image represents a meter which is a graphical symbol), and a shape for each graphical symbol also reflected in the feature vector to which it relates (the annular shape of the meter is represented by the inner and outer radius of the visible portion of the needle (col. 4 lines 54-58) along with its coverage attributes within the image (the calibration as set forth is to determine the coverage attributes of the meter such as clipping level and density); and processing one or more rules associated with one or more of the located features (col. 5 lines 41-60, and col. 7 lines 33-64, the Examiner notes that by carrying out the procedure the invention is using rules).

Claims 13-14 are similar to claim 1 except claims 13-14 are computer readable medium claims, thus the same arguments used for the rejection of claim 1 apply equally to claims 13-14.

Regarding claims 15-17, as discussed Lewis discloses associating an instrument reading with the feature image and that the reading depends on the orientation of feature image within the image data (col. 6 lines 31-37).

Regarding claim 18, Lewis discloses using optical character recognition to determine digits (col. 6 lines 11-16):

Claim 19 is similarly analyzed to claim 12.

Regarding claim 20, as discussed Lewis discloses storing the data thus the data must be transmitted to memory.

Regarding claim 21, Lewis discloses parameter data (attribute data) that is used by the algorithm (rules data, col. 5 lines 40-60).

Claim 22 is similarly analyzed to claim 12.

Regarding claims 23 and 25, Lewis discloses a mapping set of executable instructions to map the location to a value (col. 5 lines 40-60).

Regarding claim 24, as discussed the value is associated with a reading on an instrument panel.

Regarding claims 26-27, Lewis discloses a camera controlling set of executable instructions operable to capture one or more additional images at configurable periods (col. 3 lines 29-45, col. 7 lines 50-64).

Regarding claim 28, Lewis discloses an image enhancing set of instructions operable to improve a quality associated with the image (col. 6 lines 4-16).

Regarding claim 29, Lewis discloses a calibration set of executable instructions operable to calibrate the captured image (col. 4 lines 38-67).

***Allowable Subject Matter***

5. Claims 1-11 are allowed.

6. The following is a statement of reasons for the indication of allowable subject matter: Regarding claim 1, as persuasively argued by the Applicant, none of the prior art specifically discloses in combination with the other limitation of the claims a method of processing an image, comprising: processing one or more rules associated with one or more of the located features acquired from each of the feature vectors to derive a particular visual reading for a particular sub image representing a particular instrument

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depicted in the image, wherein each located feature is acquired by comparing the three pixel coordinates identified in the particular sub image to each of the feature vectors and each feature vector's three pixel coordinates. Thus claims 1-7 are allowable. Similarly claims 8-11 are allowable because the limitations disclose using the three pixel coordinates from a captured image to compare against a feature vector also having three pixel coordinates to derive a reading.

### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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**Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John B. Strege whose telephone number is (571) 272-7457. The examiner can normally be reached on Monday-Friday between the hours of 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jingge Wu can be reached on (571) 272-7429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JS

  
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